GenCore version 5.1.3

OM nucleic - nucleic search, using sw model

Run on: March 29, 2003, 19:47:07 ; Search time 70.5291 Seconds
(without alignments)
7950.588 Million cell updates/sec

Title: US-09-988-971-1_COPY_694_942
Perfect score: 249
Sequence: 1 tggctgtatgagggcctgag.....aggccctggtggaccattac 249

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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23: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT:*
24: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	249	100.0	737	24	AAL44090	Mouse MARS short i
2	249	100.0	786	24	AAL44089	Human modulator of
3	249	100.0	1183	24	ABK61465	Human cDNA encodin
4	247.4	99.4	837	21	AAC77202	Human ORFX ORF2757
5	242.6	97.4	2049	23	AAS74750	DNA encoding novel
6	213.8	85.9	1348	24	AAL44087	Mouse modulator of
7	147	59.0	603	23	AAS74748	DNA encoding novel
8	103	41.4	211	23	AAS70181	DNA encoding novel
9	100.2	40.2	1926	24	ABK83940	Human cDNA differe
10	100.2	40.2	2015	24	ABK83939	Human cDNA differe
11	100.2	40.2	2015	24	ABL66673	Lung cancer relate
12	97	39.0	675	18	AAT63421	FKBP-LCK:SH2 fusio
13	97	39.0	675	20	AAX15151	DNA encoding a fus
14	97	39.0	2032	21	AAZ46491	PKA substrate, Src
15	90.8	36.5	1254	12	AAQ13983	Lck gene fused wit
16	90.8	36.5	2320	23	AAS86451	DNA encoding novel
17	89	35.7	1911	24	ABK63704	Rat sequence diffe
18	87.6	35.2	2354	24	ABK83948	Human cDNA differe
19	87.6	35.2	2354	24	ABL68108	Ovary cancer relat
20	87.6	35.2	2433	24	AAS94859	Human DNA sequence
21	82	32.9	2109	22	AAS02049	DNA encoding molec
22	80.4	32.3	2665	24	ABK83738	Human cDNA differe
23	80.4	32.3	2665	24	ABL65189	Lung cancer relate
24	77.8	31.2	2298	24	ABK83935	Human cDNA differe
25	74.6	30.0	1611	14	AAQ46688	Human pp60 c-src g
26	74.6	30.0	1699	23	AAS87965	DNA encoding novel
27	74.6	30.0	4466	24	ABN59752	Novel human coding
28	73	29.3	414	22	AAF67577	Novel human polynu
29	66.6	26.7	1602	14	AAQ46687	Chicken pp60 c-src
30	66.6	26.7	1759	21	AAZ29700	Wild-type chicken
31	66.6	26.7	1759	22	AAH28357	Nucleotide sequenc
32	66.6	26.7	1821	21	A8K10778	SH2 unit-containin
33	65.2	26.2	282	20	AAZ08794	Human src-family k
34	65.2	26.2	282	22	AAS14748	Src-family kinase
35	65.2	26.2	1491	20	AAZ08792	Human src-family k
36	65.2	26.2	1491	22	AAS14746	Xenopus laevis src
37	65.2	26.2	1491	22	AAS14754	Xenopus laevis src
38	65.2	26.2	1491	22	AAS14755	Xenopus laevis src
39	55	22.1	2293	23	A8L01921	Drosophila melanog
40	55	22.1	2422	23	ABL19793	Drosophila melanog
41	55	22.1	6839	23	ABL01920	Drosophila melanog
42	55	22.1	33472	23	ABL19792	Drosophila melanog
43	52.2	21.0	3422	23	AAS84959	DNA encoding novel
44	52.2	21.0	4517	20	AAX90200	Human yes1 encodin
45	52.2	21.0	4517	22	AAH28359	Nucleotide sequenc

ALIGNMENTS

RESULT 1
AAL44090
ID AAL44090 standard; cDNA; 737 BP.
XX
AC AAL44090;
XX
DT 03-OCT-2002 (first entry)
XX
DE Mouse MARS short isoform protein coding sequence.
XX
KW Mouse; gene; ss; gene therapy; modulator of antigen receptor signalling;
KW MARS; tumour suppressor gene; Scr-like adaptor protein; SLAP;
KW myeloid malignancy; acute myelogenous leukaemia; autoimmune disorder;
KW immunosuppression; myeloproliferative disorder; breast cancer.
XX
OS Mus sp.
XX
FH Key Location/Qualifiers
FT CDS 1..633
FT /*tag= a
FT /product= "Mouse MARS short isoform protein"
XX
PN WO200242452-A2.
XX
PD 30-MAY-2002.
XX
PF 26-NOV-2001; 2001WO-CA01662.
XX
PR 27-NOV-2000; 2000CA-2324663.
XX
PA (HOSP-) HOSPITAL FOR SICK CHILDREN.
XX

PI Mcglade JC, Loreto MP;
XX
DR WPI; 2002-566564/60.
DR P-PSDB; AAO15458.
XX
PT New isolated modulator of antigen receptor signaling protein or its
PT fragment, useful for treating malignant disorders such as myeloid
PT malignancies, autoimmune disorders and myeloproliferative disorders -
XX
PS Claim 9; Page 77; 110pp; English.
XX
CC The invention comprises the amino acid and coding sequences of modulator
CC of antigen receptor signalling (MARS) proteins. The MARS protein is a
CC putative tumour suppressor gene and exhibits structural and sequence
CC similarity to the Scr-like adaptor protein (SLAP). The MARS DNA and
CC protein sequences of the invention are useful for the treatment of
CC myeloid malignancies (e.g. acute myelogenous leukaemia) autoimmune
CC disorders, immunosuppression, myeloproliferative disorders and
CC malignancies related to the de-regulation of tyrosine kinases (e.g.
CC breast cancer). The present cDNA sequence encodes a mouse MARS protein.
XX
SQ Sequence 737 BP; 152 A; 219 C; 218 G; 148 T; 0 other;

Query Match 100.0%; Score 249; DB 24; Length 737;
Best Local Similarity 100.0%; Pred. No. 5.3e-61;
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
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Db     280 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 339

Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
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Db     340 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 399

Qy     121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     400 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 459

Qy     181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     460 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 519

Qy     241 GACCATTAC 249
          |||||||||
Db     520 GACCATTAC 528
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RESULT 2
AAL44089
ID AAL44089 standard; cDNA; 786 BP.
XX
AC AAL44089;
XX
DT 03-OCT-2002 (first entry)
XX
DE Human modulator of antigen receptor signalling protein coding sequence.
XX
KW Human; gene; ss; gene therapy; modulator of antigen receptor signalling;
KW MARS; tumour suppressor gene; Scr-like adaptor protein; SLAP;
KW myeloid malignancy; acute myelogenous leukaemia; autoimmune disorder;
KW immunosuppression; myeloproliferative disorder; breast cancer.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 1..786
FT /*tag= a
FT /product= "Human MARS protein"
XX
PN WO200242452-A2.
XX
PD 30-MAY-2002.
XX
PF 26-NOV-2001; 2001WO-CA01662.
XX
PR 27-NOV-2000; 2000CA-2324663.
XX
PA (HOSP-) HOSPITAL FOR SICK CHILDREN.
XX
PI Mcglade JC, Loreto MP;
XX
DR WPI; 2002-566564/60.
DR P-PSDB; AAO15457.
XX
PT New isolated modulator of antigen receptor signaling protein or its
PT fragment, useful for treating malignant disorders such as myeloid
PT malignancies, autoimmune disorders and myeloproliferative disorders -
XX
PS Claim 12; Page 75; 110pp; English.
XX
CC The invention comprises the amino acid and coding sequences of modulator
CC of antigen receptor signalling (MARS) proteins. The MARS protein is a
CC putative tumour suppressor gene and exhibits structural and sequence
CC similarity to the Scr-like adaptor protein (SLAP). The MARS DNA and
CC protein sequences of the invention are useful for the treatment of
CC myeloid malignancies (e.g. acute myelogenous leukaemia) autoimmune
CC disorders, immunosuppression, myeloproliferative disorders and
CC malignancies related to the de-regulation of tyrosine kinases (e.g.
CC breast cancer). The present cDNA sequence encodes a human MARS protein.
XX
SQ Sequence 786 BP; 162 A; 234 C; 231 G; 159 T; 0 other;

Query Match 100.0%; Score 249; DB 24; Length 786;
Best Local Similarity 100.0%; Pred. No. 5.4e-61;
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
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Db     280 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 339

Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
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Qy     121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     400 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 459

Qy     181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     460 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 519

Qy     241 GACCATTAC 249
          |||||||||
Db     520 GACCATTAC 528
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RESULT 3
ABK61465
ID ABK61465 standard; cDNA; 1183 BP.
XX
AC ABK61465;
XX
DT 18-JUN-2002 (first entry)
XX
DE Human cDNA encoding protein NOV13.
XX
KW Human; gene; ss; NOVX; gene therapy; cardiomyopathy; atherosclerosis;
KW cell signal processing disorder; metabolic pathway modulation disorder;
KW diabetes; cancer; adenocarcinoma; lymphoma; prostate cancer;
KW uterus cancer; immune response; graft-versus-host disease;
KW acquired immunodeficiency syndrome; AIDS; asthma; Crohn's disease;
KW hypertension; congenital heart defects; multiple sclerosis; inflammation;
KW Albright hereditary osteodystrophy.
XX

OS Homo sapiens.
XX
PN WO200216599-A2.
XX
PD 28-FEB-2002.
XX
PF 27-AUG-2001; 2001WO-US26510.
XX
PR 25-AUG-2000; 2000US-228191P.
PR 08-FEB-2001; 2001US-267300P.
PR 20-FEB-2001; 2001US-269961P.
PR 20-MAR-2001; 2001US-277337P.
XX
PA (CURA-) CURAGEN CORP.
PA (CORT-) COR THERAPEUTICS INC.
XX
PI Burgess CE, Conley PB, Grosse WM, Hart M, Kekuda R, Shimkets RA;
PI Spytek KA, Szekeres ES, Tomlinson JE, Topper JN, Yang R;
XX
DR WPI; 2002-280937/32.
DR P-PSDB; AAU91308.
XX
PT New polypeptides for treating or preventing a disorder associated with
PT them, in humans, e.g. cardiomyopathy, atherosclerosis or cancers -
XX
PS Claim 1; Page 98; 263pp; English.
XX
CC The invention relates to an isolated polypeptide (NOVX) a mature
CC form of NOVX, a NOVX variant (differing by no more than 15%), the
CC nucleotide encoding NOVX (or its complement, fragment or variant).
CC NOVX is NOV1-14, 15a, 15b, 16a, and 16b. The NOVX polypeptide, nucleic
CC acid encoding it and antibody against it, are useful for treating or
CC preventing (e.g. by gene therapy) a NOVX-associated disorder in humans,
CC e.g. cardiomyopathy, atherosclerosis, a disorder related to cell signal
CC processing and metabolic pathway modulation, diabetes or cancers. The
CC NOVX polypeptide and nucleic acids are also useful for determining the
CC presence of predisposition to the diseases. The NOVX nucleic acid and
CC polypeptide are especially useful in therapeutic or prophylactic
CC applications for disorders associated with aberrant NOVX expression or
CC activity, e.g. cancers (e.g. adenocarcinoma, lymphoma, prostate cancer or
CC uterus cancer), immune response, graft-versus-host disease, acquired
CC immunodeficiency syndrome (AIDS), asthma, Crohn's disease, hypertension,
CC congenital heart defects, multiple sclerosis, inflammation or Albright
CC hereditary osteodystrophy and many other diseases listed in the
CC specification. The DNA encoding the protein is useful in gene therapy
CC for treating the conditions. This is also useful in detection assays,
CC chromosome mapping, tissue typing, diagnostic or prognostic assays, or
CC for developing a powerful assay system for functional analysis of
CC various human disorders, as well as in diagnostic applications. The
CC present sequence encodes a NOVX protein.
XX
SQ Sequence 1183 BP; 251 A; 359 C; 333 G; 240 T; 0 other;

Query Match 100.0%; Score 249; DB 24; Length 1183;
Best Local Similarity 100.0%; Pred. No. 6e-61;
Matches 249; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
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Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
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Db     737 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 796

Qy     121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     797 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 856

Qy     181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
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Db     857 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 916
```

Qy 241 GACCATTAC 249
|||||||||
Db 917 GACCATTAC 925

RESULT 4
AAC77202
ID AAC77202 standard; cDNA; 837 BP.
XX
AC AAC77202;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human ORFX ORF2757 polynucleotide sequence SEQ ID NO:5513.
XX
KW Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
KW hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
KW antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW cholesterol ester storage; systemic lupus erythematosus; infection;
KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW thrombosis; contraceptive; ss.
XX
OS Homo sapiens.
XX
PN WO200058473-A2.
XX
PD 05-OCT-2000.
XX
PF 31-MAR-2000; 2000WO-US08621.
XX
PR 31-MAR-1999; 99US-0127607.
PR 02-APR-1999; 99US-0127636.
PR 05-APR-1999; 99US-0127728.
PR 30-MAR-2000; 2000US-0540763.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach M;
XX
DR WPI; 2000-602362/57.
DR P-PSDB; AAB42993.
XX
PT Novel nucleic acids and peptides derived from open reading frame X,
PT useful for treating e.g. cancers, proliferative disorders,
PT neurodegenerative disorders and cardiovascular disease -
XX
PS Claim 5; Page 4692-4693; 5507pp; English.
XX
CC AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
CC sequences have activities such as: cytostatic; hepatotropic; vulnerary;
CC antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
CC osteopathic; anticonvulsant; antiarthritic; immunosuppressant;
CC immunostimulant; cardiant; thrombolytic; coagulant; vasotropic;
CC antidiabetic; hypotensive; dermatological; immunosuppressive;
CC antiinflammatory; antibacterial; antiviral; antifungal; antirheumatic;
CC antithyroid; and antianaemic. The sequences can be used for determining
CC the presence of or predisposition to, or preventing or treating
CC pathological conditions associated with an ORFX-associated disorder. The
CC nucleic acids can be used to express ORFX proteins in gene therapy
CC vectors. The proteins and nucleic acids may be used to treat cancers,
CC proliferative disorders, neurodegenerative disorders, osteoarthritis,
CC graft vs host disease, cardiovascular disease, diabetes mellitus,
CC hypertension, hypothyroidism, cholesterol ester storage, systemic lupus
CC erythematosus, severe combined immunodeficiency (SCID), AIDS, viral,

CC bacterial or fungal infection, malaria, autoimmune disorders, asthma,
CC allergies, aplastic anaemia, burns, wounds, bone and cartilage damage,
CC nocturnal haemoglobinuria, antiinflammatory disease; to enhance
CC coagulation; to inhibit thrombosis; and as a contraceptive.
XX
SQ Sequence 837 BP; 176 A; 254 C; 245 G; 160 T; 2 other;

Query Match 99.4%; Score 247.4; DB 21; Length 837;
Best Local Similarity 99.6%; Pred. No. 1.6e-60;
Matches 248; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
Db 241 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGACCTGCTGTTGTTACCTGGGAAC 300

Qy 61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
Db 301 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 360

Qy 121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
Db 361 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 420

Qy 181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
Db 421 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 480

Qy 241 GACCATTAC 249
Db 481 GACCATTAC 489

RESULT 5
AAS74750
ID AAS74750 standard; cDNA; 2049 BP.
XX
AC AAS74750;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #10554.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG10563.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 10554; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 2049 BP; 479 A; 573 C; 551 G; 443 T; 3 other;

Query Match 97.4%; Score 242.6; DB 23; Length 2049;
Best Local Similarity 98.4%; Pred. No. 4.4e-59;
Matches 245; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
Db 1244 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 1303

Qy 61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
Db 1304 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 1363

Qy 121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
Db 1364 GTCCGCCTCAACCGCCCTGCATTCTGGGACCGGATCAGACACTACAGGATTCACTGGCTT 1423

Qy 181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
Db 1424 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 1483

Qy 241 GACCATTAC 249
Db 1484 GACCATTAC 1492

RESULT 6
AAL44087
ID AAL44087 standard; cDNA; 1348 BP.
XX
AC AAL44087;
XX
DT 03-OCT-2002 (first entry)
XX
DE Mouse modulator of antigen receptor signalling protein coding sequence.
XX
KW Mouse; gene; ss; gene therapy; modulator of antigen receptor signalling;
KW MARS; tumour suppressor gene; Scr-like adaptor protein; SLAP;
KW myeloid malignancy; acute myelogenous leukaemia; autoimmune disorder;
KW immunosuppression; myeloproliferative disorder; breast cancer.
XX
OS Mus sp.
XX
FH Key Location/Qualifiers
FT CDS 282..1061
FT /*tag= a
FT /product= "Mouse MARS protein"
XX
PN WO200242452-A2.
XX
PD 30-MAY-2002.
XX
PF 26-NOV-2001; 2001WO-CA01662.

XX
PR 27-NOV-2000; 2000CA-2324663.
XX
PA (HOSP-) HOSPITAL FOR SICK CHILDREN.
XX
PI Mcglade JC, Loreto MP;
XX
DR WPI; 2002-566564/60.
DR P-PSDB; AAO15456.
XX
PT New isolated modulator of antigen receptor signaling protein or its
PT fragment, useful for treating malignant disorders such as myeloid
PT malignancies, autoimmune disorders and myeloproliferative disorders -
XX
PS Claim 10; Fig 1A; 110pp; English.
XX
CC The invention comprises the amino acid and coding sequences of modulator
CC of antigen receptor signalling (MARS) proteins. The MARS protein is a
CC putative tumour suppressor gene and exhibits structural and sequence
CC similarity to the Scr-like adaptor protein (SLAP). The MARS DNA and
CC protein sequences of the invention are useful for the treatment of
CC myeloid malignancies (e.g. acute myelogenous leukaemia) autoimmune
CC disorders, immunosuppression, myeloproliferative disorders and
CC malignancies related to the de-regulation of tyrosine kinases (e.g.
CC breast cancer). The present cDNA sequence encodes a mouse MARS protein.
XX
SQ Sequence 1348 BP; 324 A; 385 C; 362 G; 277 T; 0 other;

Query Match 85.9%; Score 213.8; DB 24; Length 1348;
Best Local Similarity 91.2%; Pred. No. 5.8e-51;
Matches 227; Conservative 0; Mismatches 22; Indels 0; Gaps 0;

```
Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
          ||||||| |||||||||||| |||||||||| |||||||| ||  ||||||||||||||
Db     558 TGGCTGTACGAGGGCCTGAGCCGGGAGAAAGCCGAGGAACTACTCCTGTTACCTGGGAAC 617

Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
           || ||||||||||||||||||||||||||||||||||||||||||||||  || || |||||
Db     618 CCCGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTGCTATTCCCTGTCC 677

Qy     121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
           ||||| |||||||||||||||| |||||||||||||||||||||||| ||  | |||
Db     678 GTCCGACTCAGCCGCCCTGCATCTTGGGACCGGATCAGACACTACAGGATACAGCGTCTT 737

Qy     181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
           |||||||||||||||||||||||||| |||||||||||||||||||||| ||| |||||
Db     738 GACAATGGCTGGCTGTACATCTCACCTCGCCTCACCTTCCCCTCACTCCACGCCTTGGTG 797

Qy     241 GACCATTAC 249
           || |||||
Db     798 GAGCATTAC 806
```

RESULT 7
AAS74748
ID AAS74748 standard; cDNA; 603 BP.
XX
AC AAS74748;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #10552.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG10561.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 10552; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 603 BP; 124 A; 189 C; 164 G; 126 T; 0 other;

Query Match 59.0%; Score 147; DB 23; Length 603;
Best Local Similarity 100.0%; Pred. No. 4e-32;
Matches 147; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy     103 GGCTCTTACTCTCTGTCAGTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACAC 162
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     199 GGCTCTTACTCTCTGTCAGTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACAC 258

Qy     163 TACAGGATCCACTGCCTTGACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCC 222
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     259 TACAGGATCCACTGCCTTGACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCC 318

Qy     223 TCACTCCAGGCCCTGGTGGACCATTAC 249
           |||||||||||||||||||||||||||
Db     319 TCACTCCAGGCCCTGGTGGACCATTAC 345
```

RESULT 8
AAS70181
ID AAS70181 standard; cDNA; 211 BP.
XX
AC AAS70181;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #5985.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.

XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG05994.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity -
XX
PS Claim 1; SEQ ID No 5985; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 211 BP; 50 A; 51 C; 72 G; 38 T; 0 other;

Query Match 41.4%; Score 103; DB 23; Length 211;
Best Local Similarity 100.0%; Pred. No. 9.2e-20;
Matches 103; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     109 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 168

Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAG 103
           |||||||||||||||||||||||||||||||||||||||||||
Db     169 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAG 211
```

RESULT 9
ABK83940
ID ABK83940 standard; cDNA; 1926 BP.
XX
AC ABK83940;
XX
DT 14-AUG-2002 (first entry)
XX
DE Human cDNA differentially expressed in granulocytic cells #511.
XX
KW Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW viral infection; parasitic infection; protozoal infection;
KW fungal infection; sterile inflammatory disease; psoriasis;
KW rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
KW cardiac reperfusion injury; renal reperfusion injury; ARDS;
KW adult respiratory distress syndrome; inflammatory bowel disease;
KW Crohn's disease; ulcerative colitis; periodontal disease;
KW granulocyte activation; chronic inflammation; allergy.
XX
OS Homo sapiens.
XX
PN WO200228999-A2.
XX
PD 11-APR-2002.
XX
PF 03-OCT-2001; 2001WO-US30821.
XX
PR 03-OCT-2000; 2000US-237189P.
XX
PA (GENE-) GENE LOGIC INC.
XX
PI Beazer-Barclay Y, Weissman SM, Yamaga S, Vockley J;
XX
DR WPI; 2002-435328/46.
XX
PT Detecting granulocyte activation by detecting differential expression
PT of genes associated with granulocyte activation, which serves as
PT diagnostic markers that is useful for monitoring disease states and
PT drug toxicity -
XX
PS Claim 1; SEQ ID No 511; 114pp; English.
XX
CC The invention relates to detecting (M1) granulocyte (GC) activation
CC (GCA), by detecting the level of expression of gene(s) (Gs) identified by
CC DNA chip analysis as given in the specification, and comparing
CC the expression level to an expression level in an unactivated
CC GC, where differential expression of Gs is indicative of GCA.
CC Also included are modulating (M2) GA by contacting GC with an agent
CC that alters the expression of at least one gene in Gs; (2) screening (M3)
CC for an agent capable of modulating GCA or an inflammation (especially
CC chronic) in a tissue, an allergic response in a subject, exposure of a
CC subject to a pathogen or sterile inflammatory disease using the
CC gene expression profile; (3) detecting (M4) an inflammation (especially
CC chronic) in a tissue, an allergic response in a subject, exposure of a
CC subject to a pathogen or sterile inflammatory disease, by detecting the
CC level of expression in a sample of the tissue of gene(s) from Gs, where
CC the level of expression of the gene is indicative of inflammation;
CC (4) treating (M5) an inflammation (especially chronic) or in a tissue,
CC an allergic response in a subject, exposure of a subject to a pathogen
CC or sterile inflammatory disease, by contacting a tissue having
CC inflammation with an agent that modulates the expression of gene(s)
CC from Gs in the tissue. M1 is useful for detecting GCA; M2 is useful for
CC modulating GA; M3 is useful for screening an agent capable of modulating
CC GCA preferably in an inflammation in a tissue; M4 is useful for
CC detecting an inflammation (especially chronic) in a tissue, an allergic
CC response in a subject, exposure of a subject to a pathogen or sterile
CC inflammatory disease (e.g. psoriasis, rheumatoid arthritis,
CC glomerulonephritis, asthma, thrombosis, cardiac reperfusion injury, renal
CC reperfusion injury, ARDS, adult respiratory distress syndrome,
CC inflammatory bowel disease, Crohn's disease, ulcerative colitis,
CC periodontal disease; also bacterial infection, viral infection,
CC parasitic infection, protozoal infection, fungal infection and M5 is
CC useful for treating one of the above conditions. The present
CC sequence represents a gene differentially expressed in granulocytes.
CC Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic
CC format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 1926 BP; 497 A; 522 C; 520 G; 387 T; 0 other;

Query Match 40.2%; Score 100.2; DB 24; Length 1926;
Best Local Similarity 62.7%; Pred. No. 9.7e-19;
Matches 156; Conservative 0; Mismatches 93; Indels 0; Gaps 0;

```
Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
           ||| | |   ||||| | ||| || || | ||||||   |  ||| ||   || || |||
Db     442 TGGTTTTTCAAGGGCATCAGCCGGAAGGACGCAGAGCGCCAACTGCTGGCTCCCGGCAAC 501

Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
             ||  ||||| | |||||||| ||| ||||||  | |||    |||||| ||||
Db     502 ATGCTGGGCTCCTTCATGATCCGGGATAGCGAGACCACTAAAGGAAGCTACTCTTTGTCC 561

Qy     121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
           || ||   |  |  ||||       | ||     | | ||| |||| |||||    |||
Db     562 GTGCGAGACTACGACCCTCGGCAGGGAGATACCGTGAAACATTACAAGATCCGGACCCTG 621

Qy     1B1 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
           ||||| ||  |  | ||||| || || ||  |||||||  | | || ||||  ||||||
Db     622 GACAACGGGGGCTTCTACATATCCCCCCGAAGCACCTTCAGCACTCTGCAGGAGCTGGTG 681

Qy     241 GACCATTAC 249
           ||||| |||
Db     682 GACCACTAC 690
```

RESULT 10
ABK83939
ID ABK83939 standard; cDNA; 2015 BP.
XX
AC ABK83939;
XX
DT 14-AUG-2002 (first entry)
XX
DE Human cDNA differentially expressed in granulocytic cells #510.
XX
KW Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW viral infection; parasitic infection; protozoal infection;
KW fungal infection; sterile inflammatory disease; psoriasis;
KW rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
KW cardiac reperfusion injury; renal reperfusion injury; ARDS;
KW adult respiratory distress syndrome; inflammatory bowel disease;
KW Crohn's disease; ulcerative colitis; periodontal disease;
KW granulocyte activation; chronic inflammation; allergy.
XX
OS Homo sapiens.
XX
PN WO200228999-A2.
XX
PD 11-APR-2002.
XX
PF 03-OCT-2001; 2001WO-US30821.
XX
PR 03-OCT-2000; 2000US-237189P.
XX
PA (GENE-) GENE LOGIC INC.
XX
PI Beazer-Barclay Y, Weissman SM, Yamaga S, Vockley J;
XX
DR WPI; 2002-435328/46.
XX
PT Detecting granulocyte activation by detecting differential expression
PT of genes associated with granulocyte activation, which serves as
PT diagnostic markers that is useful for monitoring disease states and
PT drug toxicity -
XX
PS Claim 1; SEQ ID No 510; 114pp; English.
XX
CC The invention relates to detecting (M1) granulocyte (GC) activation
CC (GCA), by detecting the level of expression of gene(s) (Gs) identified by
CC DNA chip analysis as given in the specification, and comparing
CC the expression level to an expression level in an unactivated
CC GC, where differential expression of Gs is indicative of GCA.
CC Also included are modulating (M2) GA by contacting GC with an agent
CC that alters the expression of at least one gene in Gs; (2) screening (M3)
CC for an agent capable of modulating GCA or an inflammation (especially
CC chronic) in a tissue, an allergic response in a subject, exposure of a
CC subject to a pathogen or sterile inflammatory disease using the
CC gene expression profile; (3) detecting (M4) an inflammation (especially
CC chronic) in a tissue, an allergic response in a subject, exposure of a
CC subject to a pathogen or sterile inflammatory disease, by detecting the
CC level of expression in a sample of the tissue of gene(s) from Gs, where
CC the level of expression of the gene is indicative of inflammation;
CC (4) treating (M5) an inflammation (especially chronic) or in a tissue,
CC an allergic response in a subject, exposure of a subject to a pathogen
CC or sterile inflammatory disease, by contacting a tissue having
CC inflammation with an agent that modulates the expression of gene(s)
CC from Gs in the tissue. M1 is useful for detecting GCA; M2 is useful for
CC modulating GA; M3 is useful for screening an agent capable of modulating
CC GCA preferably in an inflammation in a tissue; M4 is useful for
CC detecting an inflammation (especially chronic) in a tissue, an allergic
CC response in a subject, exposure of a subject to a pathogen or sterile
CC inflammatory disease (e.g. psoriasis, rheumatoid arthritis,
CC glomerulonephritis, asthma, thrombosis, cardiac reperfusion injury, renal
CC reperfusion injury, ARDS, adult respiratory distress syndrome,
CC inflammatory bowel disease, Crohn's disease, ulcerative colitis,
CC periodontal disease; also bacterial infection, viral infection,
CC parasitic infection, protozoal infection, fungal infection and M5 is
CC useful for treating one of the above conditions. The present
CC sequence represents a gene differentially expressed in granulocytes.
CC Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic
CC format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 2015 BP; 512 A; 540 C; 580 G; 383 T; 0 other;

Query Match 40.2%; Score 100.2; DB 24; Length 2015;
Best Local Similarity 62.7%; Pred. No. 9.8e-19;
Matches 156; Conservative 0; Mismatches 93; Indels 0; Gaps 0;

```
Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
           ||| | |   ||||| | ||| || || | ||||||   |  ||| ||   || || |||
Db     535 TGGTTTTTCAAGGGCATCAGCCGGAAGGACGCAGAGCGCCAACTGCTGGCTCCCGGCAAC 594

Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
             ||  ||||| | |||||||| ||| ||||||  | |||    |||||| ||||
Db     595 ATGCTGGGCTCCTTCATGATCCGGGATAGCGAGACCACTAAAGGAAGCTACTCTTTGTCC 654

Qy     121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
           || ||   |  |  ||||       | ||     | | ||| |||| |||||    |||
Db     655 GTGCGAGACTACGACCCTCGGCAGGGAGATACCGTGAAACATTACAAGATCCGGACCCTG 714

Qy     181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
           ||||| ||  |  | ||||| || || ||  |||||||  | | || ||||  ||||||
Db     715 GACAACGGGGGCTTCTACATATCCCCCCGAAGCACCTTCAGCACTCTGCAGGAGCTGGTG 774

Qy     241 GACCATTAC 249
           ||||| |||
Db     775 GACCACTAC 783
```

RESULT 11
ABL66673
ID ABL66673 standard; DNA; 2015 BP.
XX
AC ABL66673;
XX
DT 15-MAY-2002 (first entry)
XX
DE Lung cancer related gene sequence SEQ ID NO:5010.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX

PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.
PR 25-SEP-2000; 2000US-234923P.
PR 25-SEP-2000; 2000US-234924P.
PR 25-SEP-2000; 2000US-235077P.
PR 25-SEP-2000; 2000US-235082P.
PR 25-SEP-2000; 2000US-235134P.
PR 25-SEP-2000; 2000US-235280P.
PR 26-SEP-2000; 2000US-235637P.
PR 26-SEP-2000; 2000US-235638P.
PR 27-SEP-2000; 2000US-235711P.
PR 27-SEP-2000; 2000US-235720P.
PR 27-SEP-2000; 2000US-235840P.
PR 27-SEP-2000; 2000US-235863P.
PR 28-SEP-2000; 2000US-236028P.
PR 28-SEP-2000; 2000US-236032P.
PR 28-SEP-2000; 2000US-236033P.
PR 28-SEP-2000; 2000US-236034P.
PR 28-SEP-2000; 2000US-236109P.
PR 28-SEP-2000; 2000US-236111P.
PR 29-SEP-2000; 2000US-236B42P.
PR 29-SEP-2000; 2000US-236891P.
PR 02-OCT-2000; 2000US-237172P.
PR 02-OCT-2000; 2000US-237173P.
PR 02-OCT-2000; 2000US-237278P.
PR 02-OCT-2000; 2000US-237294P.
PR 02-OCT-2000; 2000US-237295P.
PR 02-OCT-2000; 2000US-237316P.
PR 03-OCT-2000; 2000US-237425P.
PR 03-OCT-2000; 2000US-237598P.
PR 03-OCT-2000; 2000US-237604P.
PR 03-OCT-2000; 2000US-237606P.
PR 03-OCT-2000; 2000US-237608P.
PR 01-NOV-2000; 2000US-244867P.
PR 01-NOV-2000; 2000US-245084P.
XX
PA (AVAL-) AVALON PHARM.
XX
PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
PI Soppet DR, Weaver Z;
XX
DR WPI; 2002-188264/24.
XX
PT Screening for anti-neoplastic agent involves exposing cells to a
PT chemical agent to be tested for anti-neoplastic activity, and
PT determining a change in expression of a gene of a signature gene set -
XX
PS Claim 1; SEQ ID 5010; 44pp; English.
XX
CC The present invention describes a method (M1) for screening for an
CC anti-neoplastic agent. The method involves exposing cells to a chemical
CC agent to be tested for anti-neoplastic activity, determining a change in
CC expression of at least one gene (I) of a signature gene set, where (I)
CC comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC to ABL70110), or is at least 95% identical to (S), where a change in
CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC activity and can be used in gene therapy. M1 can be used for screening
CC an anti-neoplastic agent, and can be used for producing a product which
CC is the data collected with respect to the anti-neoplastic agent as a
CC result of M1, and the data is sufficient to convey the chemical
CC structure and/or properties of the agent. M1 can be used in the
CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
CC oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ Sequence 2015 BP; 512 A; 540 C; 580 G; 383 T; 0 other;

Query Match 40.2%; Score 100.2; DB 24; Length 2015;
Best Local Similarity 62.7%; Pred. No. 9.8e-19;
Matches 156; Conservative 0; Mismatches 93; Indels 0; Gaps 0;

```
Qy      1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
          ||| | |   ||||| | ||| || || | ||||||   |  ||| ||  || || |||
Db    535 TGGTTTTTCAAGGGCATCAGCCGGAAGGACGCAGAGCGCCAACTGCTGGCTCCCGGCAAC 594

Qy     61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
            ||  ||||| | |||||||| ||| ||||||  | |||    |||||| ||||
Db    595 ATGCTGGGCTCCTTCATGATCCGGGATAGCGAGACCACTAAAGGAAGCTACTCTTTGTCC 654

Qy    121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
          || ||   | | |||        | ||      | | ||| |||| |||||    |||
Db    655 GTGCGAGACTACGACCCTCGGCAGGGAGATACCGTGAAACATTACAAGATCCGGACCCTG 714

Qy    181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
          ||||| ||  |  | ||||| || || ||   |||||||  | | || ||||  ||||||
Db    715 GACAACGGGGGCTTCTACATATCCCCCCGAAGCACCTTCAGCACTCTGCAGGAGCTGGTG 774

Qy    241 GACCATTAC 249
          |||||  |||
Db    775 GACCACTAC 783
```

RESULT 12
AAT63421
ID AAT63421 standard; DNA; 675 BP.
XX
AC AAT63421;
XX
DT 20-JUN-1997 (first entry)
XX
DE FKBP-LCK:SH2 fusion protein DNA.
XX
KW FKBP-LCK:SH2; FK506 binding protein; SH2 domain; Src homology 2;
KW fusion protein; high throughput assay; ligand; signal transduction;
KW microscintillation; ss.
XX
OS Homo sapiens.
XX
PN WO9710253-A1.
XX
PD 20-MAR-1997.
XX
PF 11-SEP-1996; 96WO-US14567.
XX
PR 12-MAR-1996; 96GB-0005210.
PR 15-SEP-1995; 95US-0003819.
XX
PA (MERI) MERCK & CO INC.
XX
PI Marcy A, Salowe SP, Wisniewski D;
XX
DR WPI; 1997-202171/18.
DR P-PSDB; AAW14788.
XX
PT Screening compounds for binding to fusion proteins with defined
PT ligands - allows high capacity assays and identification of
PT (ant)agonists or inhibitors for drug development
XX
PS Claim 29; Page 17-18; 36pp; English.
XX
CC Isolated DNA sequences (AAT63419-21) respectively code for fusion
CC proteins FKBP-ZAP:SH2, FKBP-SYK:SH2 and FKBP-LCK:SH2 (AAW14786-88)
CC comprising FK506 binding protein (FKBP) linked via a peptide linker

CC to a target protein composed of a multiple signal transduction
CC domain, i.e. ZAP:SH2, SYK:SH2 or LCK:SH2. A DNA fragment encoding
CC the linker is joined to human FKBP DNA from which the stop codon
CC has been removed. The DNA construct is cloned into an expression
CC vector and target protein DNA is then added to obtain expression
CC vectors suitable for producing the fusion proteins in transformed
CC host (pref. E. coli) cells. The fusion proteins are used in novel
CC high throughput assays utilising microscintillation plate
CC technology for functional assay of ligand binding.
XX
SQ Sequence 675 BP; 157 A; 194 C; 191 G; 133 T; 0 other;

Query Match 39.0%; Score 97; DB 18; Length 675;
Best Local Similarity 61.8%; Pred. No. 6.1e-18;
Matches 154; Conservative 0; Mismatches 95; Indels 0; Gaps 0;

```
Qy      1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
          ||| | |   ||  ||||||| |  || | || |||   | |||  ||   || ||||||
Db    373 TGGTTCTTCAAGAACCTGAGCCGCAAGGACGCGGAGCGGCAGCTCCTGGCGCCCGGGAAC 432

Qy     61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
           ||   ||  ||||||||||||||||||||| ||| ||      || || |  || |||||
Db    433 ACTCACGGCTCCTTCCTCATCCGGGAGAGCGAGAGCACCGCGGGATCGTTTTCACTGTCG 492

Qy    121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
          |||||   |  |  ||          | ||   | | | ||| |||| |||||     ||
Db    493 GTCCGGGACTTCGACCAGAACCAGGGAGAGGTGGTGAAACATTACAAGATCCGTAATCTG 552

Qy    181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
          ||||| ||  |  | |||||||| || ||  |||| || |||   || || |  |||||
Db    553 GACAACGGTGGCTTCTACATCTCCCCTCGAATCACTTTTCCCGGCCTGCATGAACTGGTC 612

Qy    241 GACCATTAC 249
            |||||||
Db    613 CGCCATTAC 621
```

RESULT 13
AAX15151
ID AAX15151 standard; DNA; 675 BP.
XX
AC AAX15151;
XX
DT 21-APR-1999 (first entry)
XX
DE DNA encoding a fusion protein of FKBP-Lck.
XX
KW Fusion protein; FK506 binding protein; FKBP; SH2 domain; human Lck;
KW screening; protein binding; ligand-protein interaction;
KW protein-protein interaction; protease inhibitor; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 1..675
FT /*tag= a
XX
PN WO9841866-A1.
XX
PD 24-SEP-1998.
XX
PF 10-MAR-1998; 98WO-US04610.
XX
PR 14-MAR-1997; 97US-0040795.
XX
PA (MERI) MERCK & CO INC.
XX
PI Hermes JD, Salowe SP, Sinclair PJ;
XX
DR WPI; 1999-070061/06.
DR P-PSDB; AAW96823.
XX
PT High throughput screening assay - for screening compounds capable of
PT binding to a fusion protein consisting of, e.g., a target protein
PT and an FK506-binding protein.
XX
PS Disclosure; Page 23; 42pp; English.
XX
CC The present sequence encodes a fusion protein comprising FK506 binding
CC protein (FKBP) and the SH2 domain of human Lck. The protein is used
CC to exemplify the method of the invention. The specification describes a
CC method for screening for compounds capable of binding to a fusion
CC protein. The method comprises mixing a test compound, a biotinylated
CC ligand, the fusion protein, a donor-labelled ligand and acceptor-labeled
CC streptavidin, incubating the mixture, measuring the time-resolved
CC fluorescence attributable to the binding of the biotinylated ligand
CC to the fusion protein in the presence of the test compound and
CC determining the binding of the biotinylated ligand to the fusion protein
CC in the presence of the test compound relative to a control assay run in
CC the absence of the test compound. The methods may be used to determine
CC if compounds are capable of binding to a protein or are capable of
CC blocking ligand-protein or protein-protein interactions. They may be
CC used to identify compounds which are protease inhibitors.
XX
SQ Sequence 675 BP; 157 A; 194 C; 191 G; 133 T; 0 other;

Query Match 39.0%; Score 97; DB 20; Length 675;
Best Local Similarity 61.8%; Pred. No. 6.1e-18;
Matches 154; Conservative 0; Mismatches 95; Indels 0; Gaps 0;

```
Qy      1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
          ||| | |   ||  ||||||| |  || | || |||   | |||  ||   || ||||||
Db    373 TGGTTCTTCAAGAACCTGAGCCGCAAGGACGCGGAGCGGCAGCTCCTGGCGCCCGGGAAC 432

Qy     61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
           ||   ||  ||||||||||||||||||||| ||| ||      || || |  || |||||
Db    433 ACTCACGGCTCCTTCCTCATCCGGGAGAGCGAGAGCACCGCGGGATCGTTTTCACTGTCG 492

Qy    121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
          |||||   |  |  ||          | ||   | | | ||| |||| |||||     ||
Db    493 GTCCGGGACTTCGACCAGAACCAGGGAGAGGTGGTGAAACATTACAAGATCCGTAATCTG 552

Qy    181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
          ||||| ||  |  | |||||||| || ||  |||| || |||   || || |  |||||
Db    553 GACAACGGTGGCTTCTACATCTCCCCTCGAATCACTTTTCCCGGCCTGCATGAACTGGTC 612

Qy    241 GACCATTAC 249
            |||||||
Db    613 CGCCATTAC 621
```

RESULT 14
AAZ46491
ID AAZ46491 standard; DNA; 2032 BP.
XX
AC AAZ46491;
XX
DT 13-MAR-2000 (first entry)
XX
DE PKA substrate, Src-family protein encoding DNA.
XX
KW Protein kinase A; PKA; PKA signaling pathway; phosphorylation; cancer;
KW kinase substrate; immunosuppressive disorder; proliferative disease;
KW HIV infection; AIDS; immunodeficiency; autoimmune disease;
KW systemic lupus erythematosus; Src-family; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 52..1581
FT /*tag= a
XX
PN WO9962315-A2.
XX
PD 02-DEC-1999.

```
XX
PF   27-MAY-1999;   99WO-GB01680.
XX
PR   27-MAY-1998;   98NO-0002419.
PR   30-DEC-1998;   98US-0114240.
XX
PA   (LAUR-) LAURAS AS.
PA   (JONE/) JONES E L.
XX
PI   Hansson V,  Levy FO,  Mustelin T,  Skalhegg BS,  Sundvold V,  Tasken K;
PI   Vang T,  Altman A,  Munshi A;
XX
DR   WPI; 2000-086801/07.
DR   P-PSDB; AAY49420.
XX
PT   Altering the activity of protein kinase signaling pathways, used for
PT   treating immunosuppressive disorders, e.g. AIDS, proliferative
PT   disorders, e.g. cancers or autoimmune diseases -
XX
PS   Claim 22; Page 94-95; 111pp; English.
XX
CC   The invention provides a novel method of altering the activity of the
CC   protein kinase A (PKA) signaling pathway in a cell that comprises
CC   altering the extent of phosphorylation of one or more PKA substrates, or
CC   kinase substrates downstream in the PKA signaling pathway. Pharmaceutical
CC   compositions containing a nucleic acid molecule that encodes a PKA
CC   substrate, or fragment, precursor or functionally equivalent variant,
CC   where the sequence is modified to alter its susceptibility to
CC   phosphorylation by PKA can be used for treating a disorder exhibiting
CC   abnormal PKA signaling activity, immunosuppressive disorders or
CC   proliferative diseases. They can be used for treating e.g. HIV
CC   infection, AIDS, common variable immunodeficiency or cancers. Conditions
CC   in which upregulation of the PKA pathway is required, such as autoimmune
CC   disease, e.g. systemic lupus erythematosus, may also be treated. The
CC   present sequence represents a DNA sequence encoding a PKA substrate,
CC   wherein the substrate is in the Src-family, preferably Lck, Fyn, Src,
CC   Yes, Fgr, Lyn, Hck Blk, Yrk, c-tkl, Fyk, Src-1 or Src-2.
XX
SQ   Sequence 2032 BP; 450 A; 576 C; 584 G; 422 T; 0 other;

  Query Match             39.0%;  Score 97;  DB 21;  Length 2032;
  Best Local Similarity   61.8%;  Pred. No. 7.9e-18;
  Matches  154;  Conservative    0;  Mismatches   95;  Indels    0;  Gaps    0;

Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
           ||| | |   ||  ||||||| |  || | || |||   | |||  ||   || ||||||
Db     430 TGGTTCTTCAAGAACCTGAGCCGCAAGGACGCGGAGCGGCAGCTCCTGGCGCCCGGGAAC 489

Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
             ||   ||  ||||||||||||||||||||| ||| ||     || || |  || |||||
Db     490 ACTCACGGCTCCTTCCTCATCCGGGAGAGCGAGAGCACCGCCGGGTCCTTTTCACTGTCG 549

Qy     121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
           |||||   | | ||         | ||   | | | ||| |||| |||||     ||
Db     550 GTCCGGGACTTCGACCAAAACCAGGGAGAGGTGGTGAAACATTACAAGATCCGTAATCTG 609

Qy     181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGGTG 240
           ||||| ||  |  | ||||||| || ||  |||| || |||   || || |  ||||
Db     610 GACAACGGTGGCTTCTACATCTCCCCTCGAATCACTTTTCCCGGCCTGCATGAACTGGTC 669

Qy     241 GACCATTAC 249
             |||||||
Db     670 CGCCATTAC 678


RESULT 15
AAQ13983
ID   AAQ13983 standard; DNA; 1254 BP.
XX
AC   AAQ13983;
XX
DT   13-DEC-1991  (first entry)
XX
DE   Lck gene fused with part of beta-galactosidase gene.
XX
KW   Multi-cloning site; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_RNA        1..78
FT                   /*tag=  a
FT                   /note= "beta-galactosidase gene fragment"
FT   misc_RNA        79..1254
FT                   /*tag=  b
FT                   /note= "lck gene"
XX
PN   JP03201994-A.
XX
PD   03-SEP-1991.
XX
PF   28-DEC-1989;   89JP-0338268.
XX
PR   28-DEC-1989;   89JP-0338268.
XX
PA   (TOKU ) TOKUYAMA SODA KK.
XX
DR   WPI; 1991-300980/41.
DR   P-PSDB; AAR14201.
XX
PT   Fused polypeptide - has amino acid sequence of beta-galactosidase
PT   with a LCK gene conjugated to the N-terminal via DNA having
PT   multi-cloning site
XX
PS   Disclosure; Fig 4,2; 15pp; Japanese.
XX
CC   The sequence consists of the first 78 bp encoding the N-terminal
CC   amino acids of the beta-galactosidase gene fused with the lck gene.
CC   It is prepd. by a claimed process in which a DNA contg. the lck
CC   gene is inserted into an E.coli expression vector. The vector has
CC   DNA contg. part or all of the beta-galactosidase gene at the
CC   appropriate site of the multi-cloning site. It is useful for
CC   producing an antibody specifically immunoreactive with only a lck
CC   gene-derived polypeptide in T cells. The antibody may recognise
CC   lck gene-derived polypeptides in human cells.
XX
SQ   Sequence 1254 BP; 291 A; 361 C; 365 G; 237 T; 0 other;

  Query Match             36.5%;  Score 90.8;  DB 12;  Length 1254;
  Best Local Similarity   61.3%;  Pred. No. 4e-16;
  Matches  146;  Conservative    0;  Mismatches   92;  Indels    0;  Gaps    0;

Qy       1 TGGCTGTATGAGGGCCTGAGCAGGGAGAAAGCAGAGGAACTGCTGTTGTTACCTGGGAAC 60
           ||| | |   ||  ||||||| |  || | || |||   | |||  ||   || ||||||
Db     100 TGGTTCTTCAAGAACCTGAGCCGCAAGGACGCGGAGCGGCAGCTCCTGGCGCCCGGGAAC 159

Qy      61 CCTGGAGGGGCCTTCCTCATCCGGGAGAGCCAGACCAGGAGAGGCTCTTACTCTCTGTCA 120
             ||   ||  ||||||||||||||||||||| ||| ||     || || |  || |||||
Db     160 ACTCACGGCTCCTTCCTCATCCGGGAGAGCGAGAGCACCGCGGGATCGTTTTCACTGTCG 219

Qy     121 GTCCGCCTCAGCCGCCCTGCATCCTGGGACCGGATCAGACACTACAGGATCCACTGCCTT 180
           |||||   |  |  ||          | ||   | | | ||| |||| |||||     ||
Db     220 GTCCGGGACTTCGACCAGAACCAGGGAGAGGTGGTGAAACATTACAAGATCCGTAATCTG 279

Qy     181 GACAATGGCTGGCTGTACATCTCACCGCGCCTCACCTTCCCCTCACTCCAGGCCCTGG 238
           ||||| ||  |  | ||||||| || ||  |||| || |||   || || |  ||||
Db     280 GACAACGGTGGCTTCTACATCTCCCCTCGAATCACTTTTCCCGGCCTGCATGAACTGG 337


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